

REMARKS/ARGUMENTS

Claims 1-9, 14-22, 27-29 and 34-45 are pending in the application.

By the present Amendment, all of the independent claims have been amended to more clearly recite that the amounts of the first fuel and the second fuel delivered to the multiple fuel engine are controlled such that an operating speed of the engine is maintained below a predetermined governed speed of the engine corresponding to a governed speed of the engine when the engine is only utilizing the first fuel. Basis for the amended claim language is provided in the specification, for example, in paragraphs [0031], [0034], [0035] and [0065], and Figs. 1 and 12.

In the Office Action dated March 1, 2006, Claims 44 and 45 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Brown et al. '800 in view of Tanaka '674. Claims 1-9, 14-22, 27-29 and 34-43 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Brown et al. '800 and Tanaka '674 in view of Wong '242. According to the Office Action, Brown et al. '800 discloses the claimed features except maintaining an operating speed of the engine below a governed speed of the engine. Tanaka '674 is relied upon as teaching this missing feature.

It is submitted that the amended claims distinguish over the prior art of record. Independent Claims 1, 21, 28, 41, 43 and 44 recite, in part, either means for or the step of controlling amounts of the first fuel and the second for delivery to the multiple fuel engine based on at least one of the operating characteristics, wherein an operating speed of the engine is maintained below a predetermined governed speed of the engine corresponding to a governed speed of the engine when the engine is only utilizing the first fuel. Brown et al. '800 discloses a method for delivering liquid fuel and gaseous fuel to a dual fuel engine operating in a dual fuel mode including the establishment of a governor output value indicative of a total fuel energy rate desired to be delivered to the engine to maintain a desired engine speed. As acknowledged in the March 1, 2006 Office Action, Brown et al. '800 does not teach or suggest the maintenance of an engine operating speed below a governed speed of the engine, as presently claimed.

If the fuel delivery system of Brown et al. '800 was modified in view of the teachings of Tanaka '674 as proposed in the latest Office Action, such a combination would not read on the presently claimed invention. Tanaka '674 uses two separate electronic controllers in

the disclosed system: one to control diesel fuel; and the other for gaseous fuel. Tanaka '674 recognizes that the speed setting of the diesel controller in such a system may be set higher than the speed setting of the gaseous fuel controller (see page 3, line 61 to page 4, line 4 and page 11, line 26). However, Tanaka '674 controls the diesel governor speed setting to accomplish this difference.

The present invention does not control a diesel governor/controller speed setting in order to set it higher than the speed setting of a gaseous fuel controller. Instead, the presently claimed invention controls the amounts of the first and second fuels delivered to the engine such that the actual operating speed of the engine is maintained below the governed speed of the engine when it is only using the first fuel. That governed speed is predetermined and is not adjusted based upon the speed setting of the gaseous fuel controller in the manner taught by Tanaka '674. Thus, the actual engine speed during dual-fuel operation in accordance with the presently claimed invention will always be slightly lower than the predetermined governed speed of the engine when it is only using the first fuel.

Accordingly, it is submitted that the claims are patentable over Brown et al. '800 and Tanaka '674.

Wong '242 does not remedy the deficiencies of Brown et al. '800 and Tanaka '674. Wong '242 generally discloses a control system for a dual fuel engine which utilizes a broadband communications link. Wong '242 does not teach or suggest the maintenance of an operating speed of the engine below a predetermined governed speed of the engine corresponding to a governed speed of the engine when the engine is only utilizing the first fuel, as presently claimed.

Accordingly, it is submitted that independent Claims 1, 21, 28, 41 and 43, and the claims that depend therefrom, are patentable over the prior art of record. An early Notice of Allowance of this application is therefore respectfully requested.

In the event that any outstanding matters remain in connection with this application, the Examiner is invited to telephone the undersigned at (412) 263-4340 to discuss such matters.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Alan G. Towner", written in a cursive style.

Alan G. Towner
Registration No. 32,949
Pietragallo, Bosick & Gordon LLP
One Oxford Centre, 38th Floor
301 Grant Street
Pittsburgh, PA 15219
Attorney for Applicants

(412) 263-4340